

Claims

1. A two-dimensional drawings creation method of creating two-dimensional drawings based on a three-dimensional model by
5 using a computer source including a processing device source, a memory source, an input device, and an interface, in which
the processing device source executes a processing including a step of holding, as three-dimensional shape information of a parts model having a shape changing element
10 whose shapes is changed before and after assembling and other common elements, three-dimensional information on the shape before assembling and the shape after assembling of the shape changing element and the shape of the common elements, a step of setting a restriction condition between the shape before
15 assembling of the shape changing element and the shape of the common element to become a single part to each other, a step of setting a restriction condition between the shape after assembling of the shape changing element and the shape of the common elements to become a single part to each other, and a
20 step of developing the held three-dimensional information into the two-dimensional drawing in accordance with each of the restriction conditions, based on the operation program of the memory source.
- 25 2. The two-dimensional drawing creation method according

to claim 1, wherein the method includes;

5 a step of judging the parts model as to whether it is before or after assembling, and not displaying the shape after assembling of the shape changing element, while displaying the shape before assembling of the shape changing element and the shape of the common elements before assembling, and

10 a step of not displaying the shape before assembling of the shape changing element while displaying the shape after assembling of the shape changing elements and the shape of the common element after assembling.

3. A three-dimensional CAD system including a data base that holds, as three-dimensional shape information of a parts model having a shape changing element whose shape is changed
15 before and after assembling and other common elements, three-dimensional information on the shape before assembling and the shape after the assembling of the shape changing element and the shape of the common elements, and a calculation unit that sets a restriction condition between the shape changing
20 element before assembling and the shape of the common elements to become a single part to each other, sets a restriction condition between the shape after assembling of the shape changing element and the shape of the common elements to become a single part to each other, and develops the three-
25 dimensional shape information held in the data base into a

two-dimensional drawing in accordance with each of the restriction conditions.

4. The three-dimensional CAD system according to claim 3,
5 including;

a display unit for displaying the two-dimensional drawing on a screen, in which

the calculation unit judges for the parts model as to whether it is before or after assembling, does not display the
10 shape after assembling of the shape changing elements while displaying the shape before assembling of the shape changing elements and the shape after assembling of the common elements on the display screen before assembling and does not display the shape before assembling of the shape changing element
15 while displaying the shape after assembling of the shape changing elements and the shape of the common elements on the display screen after assembling.

5. A three-dimensional CAD program containing a program
20 for causing a computer to execute a processing attained with each of the means according to any one of claims 3 and 4.

6. A recording medium which is a computer-readable recording medium storing the three-dimensional CAD program
25 according to claim 5.